

Power of Action...

Ways to protect your water

While it is important to observe what is happening around us, it is just as important to take the information and turn it into positive action!

Here are some ideas for protecting your local waterbodies:

1. Never dump anything into storm drains. Storm drains empty directly into nearby waterways and can pollute them.

2. Pick up after your pet. Animal waste contains nutrients and bacteria that can contaminate our water. (This includes livestock waste, too.)



3. Read the labels on products that you use around the house to make sure that they are environmentally friendly.

4. Walk, bike or use mass transportation. Automobiles release harmful pollutants into the air, which increase acid rain. Too much acid rain can disrupt the pH balance of a waterbody.



5. Plant native plants that need little water, fertilizer or pesticides to prevent soil erosion and reduce runoff into nearby waterways.

6. Join a local volunteer water monitoring group or organize a stream, wetland or coastal clean-up—encourage others to join you.

7. Learn more about your watershed! Contact your local municipality, search online or reach out to a local watershed organization for more information.



Power of Action...

continued...

8. Contact the government officials who make decisions about the way land is used in your watershed and encourage them to help protect water resources.

9. Help educate people in your community about the importance of water and the impact of their behaviors on water quality.



10. Make a donation to a local watershed group or water-related charity, or provide an educational opportunity to people in a developing country by donating a WWMC test kit.

World Water Monitoring Challenge™

Coordinated by:



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You have the power to...



World Water Monitoring Challenge

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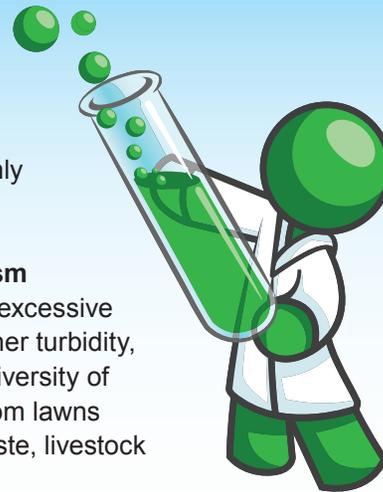
Power of Investigation...

Other tests you might consider

The tests in the World Water Monitoring Challenge test kit are not the only tests that water quality monitors can conduct. Here are a few more:

Nutrients (Nitrates and Phosphates): Chemicals that an organism needs to live and grow. Too many nutrients in a waterbody can cause excessive plant growth (e.g. algae blooms, scum) and decay. This can lead to higher turbidity, unpleasant smell and color, lower levels of dissolved oxygen and poor diversity of aquatic life. High nutrient levels can be caused by runoff of fertilizers from lawns and farms, sewage discharges and excessive animal waste (e.g. pet waste, livestock manure).

Fecal Coliforms: Bacteria commonly found in human and animal waste. While these bacteria themselves are generally not dangerous, their presence indicates that harmful bacteria and viruses may be present. Bacteria and viruses pose a health threat to humans and wildlife. Sources of fecal coliforms include runoff from farms and city streets, sewage discharges, septic systems and animal waste.



Testing Equipment Providers

LaMotte Company
www.lamotte.com

CHEMetrics
www.chemetrics.com

Hach Company
www.hach.com

Hanna Instruments
www.hannainst.com

Industrial Test Systems, Inc.
www.sensafe.com

Orbeco-Hellige
www.orbeco.com

Tintometer/Lovibond
www.tintometer.com

Water Monitoring Equipment & Supply
www.watermonitoringequip.com

Electrical Conductivity: The ability of water to pass an electrical current. Most waterbodies tend to have a regular range of conductivity. Once you have figured out this range (through repeated testing), you can use it as a standard for comparison. A result outside your waterbody's range could be the sign of a problem. For example, an increase in conductivity may indicate discharge from a faulty sewage system or the runoff of road salt. A decrease might indicate an oil spill or factory discharge.

Macroinvertebrates: Organisms that are large enough to be seen with the naked eye and don't have a backbone (e.g. crayfish, snails, worms, leeches, dragonflies, mayflies, etc). Some macroinvertebrates are more sensitive to pollution than others. So, if you only find macroinvertebrates at your site that can tolerate pollution, but you don't find any of the more sensitive types, there might be pollution present.

Power of Observation...

What to look for at your site

While you are at your test site, make a note of the following:

1. How is the land around your site being used? Are there farms, houses, factories, offices, stores or some mixture of these things?
2. What is the source of your waterbody—where has it come from and where is it going?
3. Is there plant life growing alongside the waterbody (e.g. trees, shrubs, grasses)?
4. What is the weather like? What was it like the day before?
5. How does the water look? Is there trash in it? Is it oily or foamy?
6. Do you see insects in or near the waterbody (hint: try turning over a few rocks)? If so, does it look like there are several different types?
7. Is there other wildlife present (e.g. fish, frogs, birds)?



For Stream Monitors...

8. Is the stream deep or shallow, wide or narrow?
9. Is the streambank eroding (does it look like it's crumbling)?
10. Are there lots of rocks and logs in the stream?

Visit www.MonitorWater.org for help interpreting your observations.